MEDVEDEV, K.D., kandidat tekhnicheskikh nauk.

Determining safe angles for the banks of open pit mines. Gor.zhur. no.6:19-23 Je '56. (MLRA 9:8)
(Strip mining) (Mine surveying)

ALYMKULOV, Zh.A.; MEDVEDEV, K.D.

Physicomechanical properties of coals and enclosing rocks of the Kara-Kechinskoye brown coal deposit. Izv.AN Kir.SSR.Ser.est.i tekhn.nauk 2 no.2:3-20 '60. (MIRA 14:10)
(Kirghizistan--Lignite)

MEDVEDEV, K.I.; KUNYANSKIY, Ya.I.

Construction of compressor stations for the first section.
Stroi. truboprov. 8 no.6:22-23 Je '63. (MIRA 16:7)

(Pipelines--Buildings and structures)

L 31823-66 EWT(d)/EWT(l)/EWP(m)/EWT(m)/EWP(w)/EWP(v)/EWP(k) IJP(c) WW/EM

ACC NR: AP6020732 SOURCE CODE: UR/0421/66/000/003/0117/0119

AUTHOR: Avduyevskiy, V. S. (Moscow); Medvedev, K. I. (Moscow)

ORG: none

TITLE: Investigation of laminar boundary layer separation on a cone at an angle of attack

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 3, 1966, 117-119

TOPIC TAGS: supersonic aerodynamics, laminar boundary layer, boundary layer separation, boundary layer thickness, supersonic flow

ABSTRACT: The results of an experimental investigation of laminar boundary layer separation on a cone at an angle of attack in a supersonic gas flow are presented.

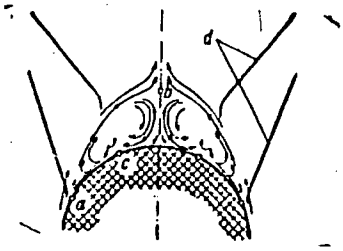

Fig. 1. Flow configuration

a - Point of separation of boundary layer;
b - point of divergence of streamlines;
c - point of separation of streamlines;
d - shock waves.

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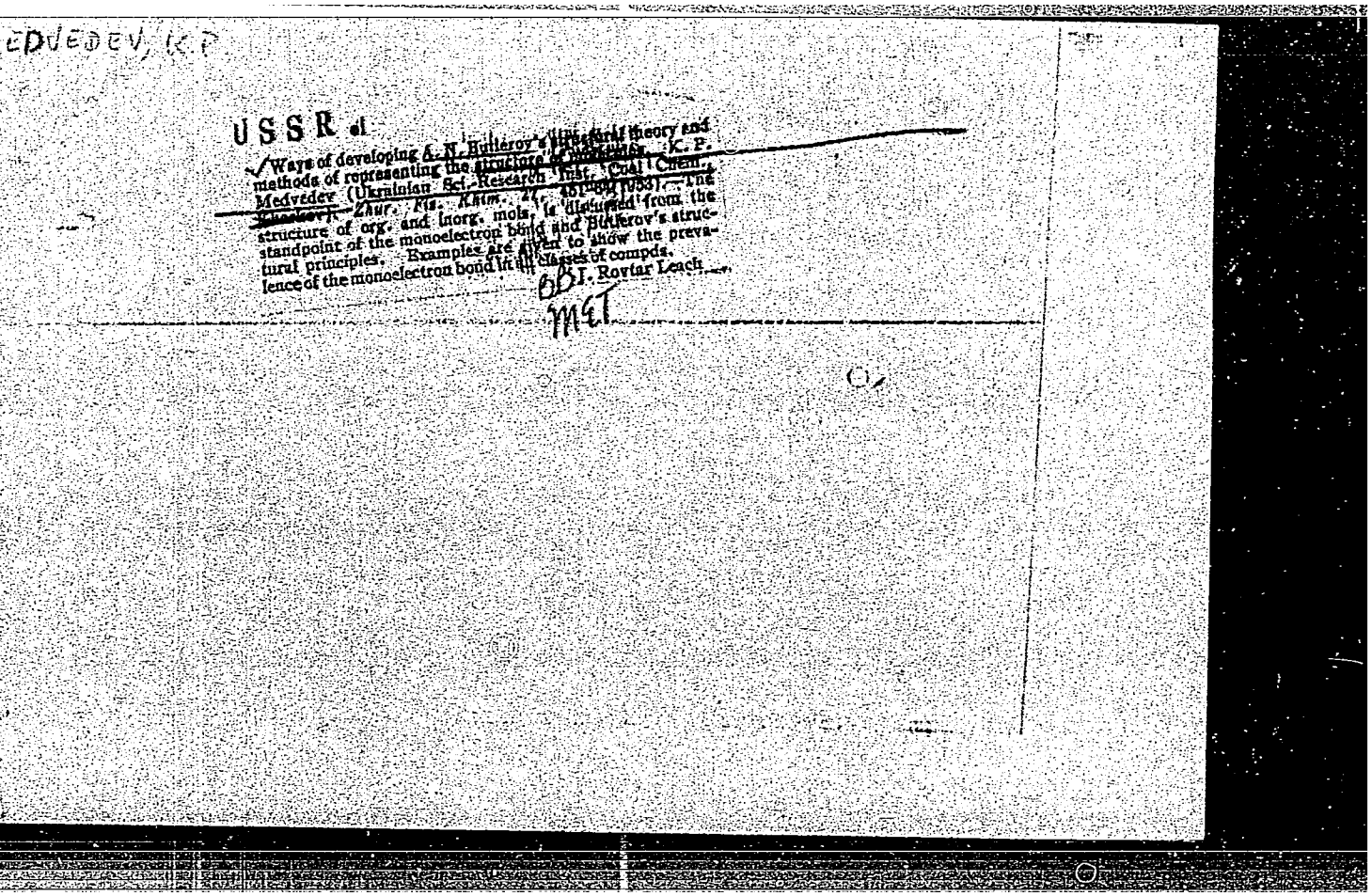
L 31823-66

ACC NR: AP6020732

The location of the line of separation and its dependence on the angle of attack is experimentally determined in the range of M_∞ = 2.1, 3.6, and 6; Re values from 10^5 to 10^6 for cones with semiapex angles of 5, 10, 15, and 30°; and illustrated by high-speed photographs and graphs. It is shown that the relative flow rate of gas from the separation zone increases with the cone angle, and that this leads to the reduction of the separation zone. The assumed flow pattern in the separation zone given in Fig. 1 shows that the divergent flow on both sides of the line $z = \pi$ on the cone surface separates once more, forming a complex system of vortices (z is the angle from the line of flow divergence). The thickness of the laminar boundary layer on the cone increases with respect to the distance from the cone apex according to the formula $\delta \sim \sqrt{x}$. Orig. art. has: 7 figures and 5 formulas. [AB]

SUB CODE: 20/ SUBM DATE: 02Dec65/ ORIG REF: 002/ ATD PRESS: 5020

Card 2/2



EDVEDEV, K.P.

USSR

Ways of developing A. N. Butlerov's structural theory and methods of representing the structure of compounds. K. P. Medvedev (Ukrainian Sci.-Research Inst. Coal Chem., Kharkov). Zhur. Fiz. Khim., 27, 481(1953).—The structure of org. and inorg. mols. is discussed from the standpoint of the monoelectron bond and Butlerov's structural principles. Examples are given to show the prevalence of the monoelectron bond in all classes of compds.

BBT. Rovtar Leach

MET

MEDVEDEV, K.P.

USSR/ Chemistry Physical chemistry

Card : 1/1 Pub. 147 - 25/25

Authors : Medvedev, K. P.

Title : On the nature of the trans-effect law

Periodical : Zhur. fiz. khim. 28/7, 1353 - 1359, July 1954

Abstract : Discussion on the nature of the trans-effect law, discovered in 1928 by I. I. Chernyaev and presently used as a basis for the synthesis of new complex compounds. The physical substance of the trans-effect law was revealed on the basis of the chemical bond in covalent complex compounds. The role of the central atom in the formation of mono-electron bonds, by utilizing the very same electrons and shells which take part in the formation of simple compounds, is explained. Twelve USSR references (1926 - 1953). Table.

Institution : Ukrainian Scientific Research Coal Chemical Institute, Kharkov

Submitted : May 11, 1953

Medvedev, K.P.

V 215. USE OF RADIOACTIVE ISOTOPE S35 FOR INVESTIGATION OF THERMO-CHEMICAL CONVERSIONS OF SULPHUR COMPOUNDS OF COAL DURING COKING. Pt 1. 62
Kulichenko, A.Z. and Medvedev, K.P. (Izv. Akad. Nauk SSSR, Otdel. Tekh. Nauk (Bull. Acad. Sci. U.S.S.R., Sect. Tech. Sci.), July 1955, 145-149).

VODNEV, G.G.; SHELKOV, A.K.; DIDENKO, V.Ye.; FILIPPOV, B.S.; TSAREV, M.N.; ZASHVARA, V.G.; LITVINENKO, M.S.; MEDVEDEV, K.P.; MOLODTSOV, I.G.; LGALOV, K.I.; RUBIN, P.G.; SAPOZHNIKOV, L.M.; TYUTYUNNIKOV, G.N.; DMITRIYEV, M.M.; LEYTES, V.A.; LERNER, B.Z.; MEDVEDEV, S.M.; REVYAKIN, A.A.; TAYCHER, M.M.; TSOGLIN, M.E.; DVORIN, S.S.; RAK, A.I.; OBUKHOVSKIY, Ya.M.; KOTKIN, A.M.; ARONOV, S.G.; VOLOSHIN, A.I.; VIROZUB, Ye.V.; SHVARTS, S.A.; GINSBURG, Ya.Ye.; KOLYANDR, L.Ya.; BELETSKAYA, A.F.; KUSHNEREVICH, N.R.; BRODOVICH, A.I.; NOSALEVICH, I.M.; SHTROMBERG, B.I.; MIROSHNICHENKO, A.M.; KOPELIOVICH, V.M.; TOPORKOV, V.Ya.; AFONIN, K.B.; GOFTMAN, M.V.; SEMENENKO, D.P.; IVANOV, Ye.B.; PEYSAKHZON, I.B.; KULAKOV, N.K.; IZRAELIT, E.M.; KVASHA, A.S.; KAFTAN, S.I.; CHERMNYKH, M.S.; SHAPIRO, A.I.; KHALABUZAR', G.S.; SEKT, P.Ye.; GABAY, L.I.; SMUL'SON, A.S.

Boris Iosifovich Kustov; obituary. Koks i khim. no.2:64 '55. (MLRA 9:3)
(Kustov, Boris Iosifovich, 1910-1955)

MEDVEDEV, K. P.
SSR/Chemistry - Fuels

FD-3239

ard 1/1 Pub. 41-20/22

uthor : Kulishenko, A. Z. and Medvedev, K. P., Khar'kov

itle : Use of radioisotope S35 in investigating the thermochemical conversion of sulfur compounds in coal during coking

eriodical : Izv. AN SSSR, Otd. Tekh. Nauk 7, 145-148, Jul 55

bstract : Gives formulas for computing distribution of active sulfur, added radioactive sulfur, pyritic sulfur, and organic sulfur in the products of thermal decomposition of coal. Explains experimental procedure used to verify theory. Finds results in agreement with those obtained by Eaton, Hyde, and Road (Analytical Chemistry, Vol 21, No 9, 1949). Three tables. Seven references, 6 USSR.

nstitution :

ubmitted : 28 February 1955

Medvedev, K.P.

The Behaviour of Pyritic and Organic Sulphur During Coking of Coals and Coal Blends. K. P. Medvedev and V. M. Petropolskaya. (*Izvest. Akad. Nauk SSSR, Otdelenie Tek. Nauk*, 1955, (5), 134–139). [In Russian]. The behaviour of sulphur during coking of individual coals and blends of coals from the Donets basin was investigated using radioactive additions of pyritic sulphur. It was found that on heating, hydrogen sulphide evolved up to a certain temperature (350–500° C, depending on coal rank) originates from pyritic sulphur only; with further increase of temperature, the concentration of organic sulphur in the hydrogen sulphide evolved increases. The temperature at which the evolution of organic sulphur begins and the total amount removed on carburization depends on the rank of coal.—v. o.

Medveder, K. P.

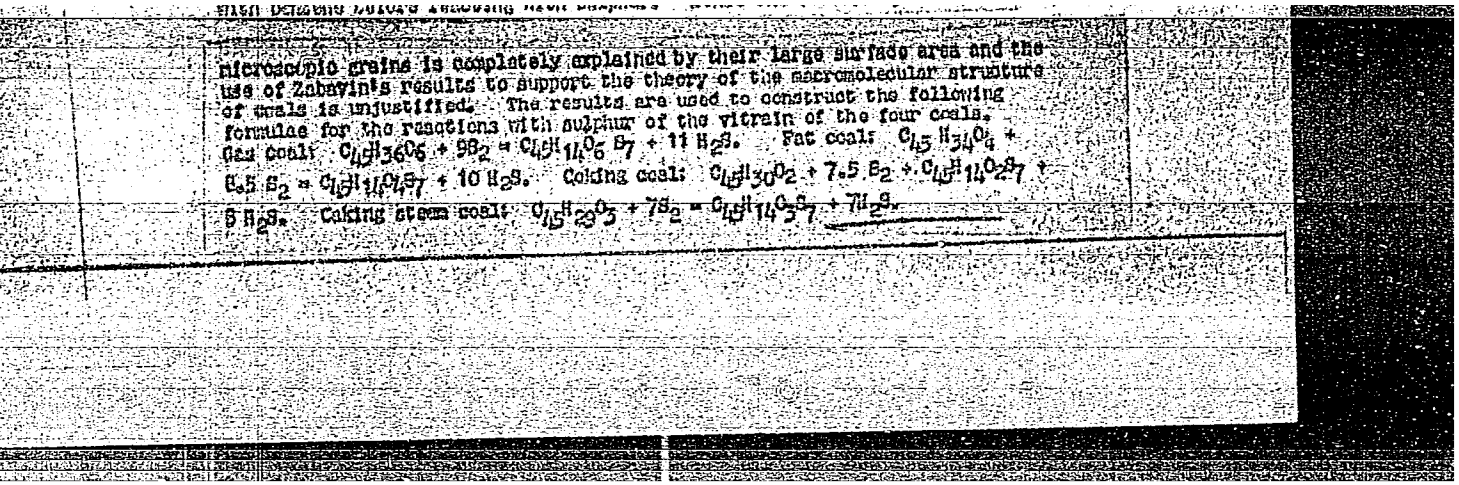
400

The magnetic criterion of the type of covalent complex-compound bonds. K. P. Medvedev (Ukrain. Sci. Research Inst. Coal Chem., Kharkov). *Zhur. Fiz. Khim.* 29, 1713–19 (1955).—An application of dipole measurement results found in the literature is made to an understanding of the bond nature which gives a satisfactory explanation in the case of covalent compds. The nature of typical covalent complex formation consists in the creation of single-electron bonds between the central atom and the addenda. Either positively charged metal ions or neutral atoms can be the central atoms. Typical ions that are complex formers have *d* electrons, and unfilled *d* or *s* shells. When the *d* shell is unfilled, the electron pair forming a single-electron bond occupy the same orbit of the central atom. The unattached electrons become paired in the *d* shell, setting free the orbits for the formation of single-electron bonds. Ions with filled *d* shell but unfilled *s* shell, which form single-electron bonds, can have their electrons sharing one *s* orbit. With more than 2 single-electron bonds, the participating electrons can occupy the *p* orbits, but these electrons seem to occupy only one orbit in the central atom. W. M. Sternberg

CH

EDVEDEV, K.P.

4087. RELATIONSHIP BETWEEN REACTIVITY AND SURFACE AREA OF COAL GRAINS. Nedvedev, K.P. and Petropol'skaya, V.M. (Izv. Akad. Nauk SSSR, Otdel. Tekh. Nauk (Bull. Acad. Sci. U.S.S.R., Sect. Tech. Sci.), Dec. 1956, 129-133). Four classes of coal were ground to different finenesses and reacted with flowers of sulphur at 350°C and the hydrogen sulphide driven off was determined iodometrically. The possibility of sulphur in the coal taking part in the reaction was eliminated. The quantity of hydrogen separated from each coal [illegible] when the coal grains were microscopic



microscopic grains is completely explained by their large surface area and the use of Zabavin's results to support the theory of the macromolecular structure of coals is unjustified. The results are used to construct the following formulae for the reactions with sulphur of the vitrain of the four coals. Gas coal: $C_{45}H_{36}O_6 + 9S_2 = C_{45}H_{14}O_6S_7 + 11\,H_2S$. Fat coal: $C_{45}H_{34}O_4 + 6.5\,S_2 = C_{45}H_{14}O_4S_7 + 10\,H_2S$. Coking coal: $C_{45}H_{30}O_2 + 7.5\,S_2 = C_{45}H_{14}O_2S_7 + 8\,H_2S$. Coking steam coal: $C_{45}H_{29}O_3 + 7S_2 = C_{45}H_{14}O_3S_7 + 7H_2S$.

MEDVEDEV K. P.

The thermochemical mechanism of iron pyrite conversion during the coking of coal mixes. K. P. Medvedev. *Izvest. Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk* 1956, No. 4, 75-84; cf. *C.A.* 50, 12015, 21(6d).—The very complex nature of iron pyrite conversion during the coking of coal was shown in tests involving S^{35} tagged atoms. The results obtained depended on the coking temp. and in particular on the coal properties, such as the degree of coal metamorphism, the nature and properties of the coal substance, the agglutination properties, etc. Ten equations are given showing the different paths of pyrite conversion with different coals and conversion conditions, which may explain the absence of adequate solution of this very important problem. W. M. Stomberg

MEDVEDEV, K.P.

The relation between reactivity and the coal particle surface. K. P. Medvedev and V. M. Petropol'skaya. *Izvest. Akad. Nauk S.S.S.R., Otdel. Tekh. Nouk* 1956, No. 12, 129–33.—The interaction of the org. coal components with elementary S was used in the study of coal reactivity and the exposed coal surface. One g. carefully sized coal was mixed with 1 g. S flour, heated to 350° ± 3°, and the H_2S was detd. iodometrically. Special tests showed that pyrite S did not take part in the reaction. The reaction was a function of the coal particle size, and did not start until the av. diam. was below 2 mm. The total H in the vitrain of the different kinds of coal (0.01–0.001 mm.) which reacted with S was related to the empirical vitrain formula, and the H:C:O:S proportion in the unreacted part of the different grades of coal was found to be the same. The total reaction consisted in (*a*) a dehydration of the coal substance and (*b*) replacement of H with S. The results appear significant in the study of vitrain, fusain, spores, and other components of fossil fuels. W. M. Sternberg

68-58-3-6/22

AUTHORS: Medvedev, K.P. and Petropol'skaya, V.M.

TITLE: Theoretical and Experimental Basis of the Application of Radio-isotopes for the Investigation of the Process of Thermal Decomposition and Caking of Coals (Teoreticheskiye i eksperimental'nyye osnovy primeneniya radioizotopov k issledovaniyu protsessa termicheskogo razlozheniya i spekaniya kamennykh ugley)

PERIODICAL: Koks i Khimiya, 1958, Nr 3, pp 25 - 29 (USSR).

ABSTRACT: The process of carbonisation of coals was studied using small additions (0.2 - 0.4%) to the carbonised samples of alkali and alkali-earth sulphates and iron sulphide and bisulphide marked with radio-active sulphur S^{35}. Samples so prepared were carbonised in a quartz tube to a temperature 900 - 950 °C, and the distribution of S^{35} between the carbonisation products was determined. The most interesting results were obtained with $CaSO_4$ additions. It was established that with increasing coal rank, the ability of coal to reduce sulphate to sulphide and to react with sulphate sulphur incorporating it into the organic structure of coke varies according to curves which possess a minimum and a maximum for the corresponding two reactions (Fig.1). The positions of the maximum and the minimum are situated at the medium rank of

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Theoretical and Experimental Basis of the Application of Radio-isotopes for the Investigation of the Process of Thermal Decomposition and Caking of Coals

coals (v.m. content 32-37%). It was established by direct experiments with a coking coal with an addition of $CaSO_4$, that its thermochemical transformation begins at the beginning of thermal decomposition of the coal (350 °C) and is most intensive in the plastic range of the coal (350-500 °C). Further coking experiments were done in which increasing additions of $CaSO_4$ were made and the proportions of sulphur transformed into CaS and organic sulphur determined (Fig.2). It was found that the proportion of the sulphate sulphur transformed into organic sulphur initially increases with increasing sulphate addition and then remains practically constant while the amount of sulphate sulphur reduced to sulphide continuously increases. This indicates that the ability of a coal to transform sulphate sulphur into organic sulphur is limited and can be used as an index of the caking ability of coal. This was confirmed by the following experiments. An asphaltene was synthesised by condensation of naphthalene in the presence of $AlCl_3$, which possessed

Card 2/3 high caking ability. This substance was added in increasing

Theoretical and Experimental Basis of the Application of Radio-isotopes for the Investigation of the Process of Thermal Decomposition and Caking of Coals

proportions to coke and a non-caking coal together with .4% of $CaSO_4$. The mixtures were caked after which the distribution of sulphate sulphur in the coke and volatile coking products was determined (Tables 1 and 3). It was found that with increasing asphaltene additions, the reducing ability of coke decreases while the transfer of sulphate sulphur into organic sulphur increases. Similar results were obtained with non-caking coke. An investigation of the synthetic asphaltene indicated that its chemical nature and properties were similar to those of products of thermal decomposition of a caking coal separated by Dryden (Ref 11). There are 2 tables, 2 figures and 11 references, 5 of which are Soviet, 5 English and 1 German.

ASSOCIATION: UKhIN

MEDVEDEV, K.D., dots., kand.tekhn.nauk.

Complete boundary state in the equilibrium of rock environment. Nauch. dokl. vys. shkoly; gor. delo no.3:56-61 '58. (MIRA 11:9)

1.Predstavlena Sovetom gornogeolgicheskogo fakul'teta Frunzenskogo politekhnicheskogo instituta.

(Faults (Geology)
(Geological modeling)

MEDVEDEV, K.P.; KULISHENKO, A.Z.

Use of radioactive isotopes for investigating the various forms of sulfur contributing to the production of carbon disulfide in the process of coking. Khim. i tekh. topl. i masel 3 no.9: 62-66 S '58. (MIRA 11:10)
(Carbon disulfide) (Sulfur) (Radioactive tracers)

SOV/68-58-8-5/28

AUTHORS: Medvedev, K.P., Petropol'skaya, V.M. and Nikitina, K.A.

TITLE: Catalytic Action of Additions of Organic and Inorganic Substances on the Behaviour of Sulphur During the Process of Coking of Coals (Kataliticheskoye deystviye dobavok organicheskikh i neorganicheskikh veshchestv na povedeniye sery v protsesse koksovaniya ugley)

PERIODICAL: Koks i Khimiya, 1958, Nr 8, pp 15 - 18 (USSR)

ABSTRACT: Views expressed in the literature on the catalytic action of various organic and inorganic additives to coals on the evolution of sulphur during coking are reviewed. In order to check the possibility of such an action, numerous experiments on coking various coals with $AlCl_3$ (Tables 1, 2), Fe_2O_3, $CuCl_2$ (Table 3), $MgCO_3$, CaO, Al_2O_3, NH_4Cl (Table 4), urea, thiourea, pyridine, aniline, aniline chloride, heavy pyridine bases, β-naphthylamine, benzidine chloride, phenol, xylols, brown coal, hexachlorocyclohexane (Table 5), anthracene oil, lignine and chlorinated lignin were carried out. The scale of experiments varied from small laboratory tests to 200 kg pilot plant tests. In no case was any improvement in

Cardl/2

SOV/68-58-8-5/28

Catalytic Action of Additions of Organic and Inorganic Substances on the Behaviour of Sulphur During the Process of Coking of Coals

the degree of desulphurisation of coke observed. On consideration of the heterogeneous nature of the coking process, it is concluded that efforts of various investigators to remove sulphur during coking by "catalytic" action of various additives will remain unsuccessful. There are 5 tables and 11 references, 7 of which are Soviet, 3 German and 1 English.

ASSOCIATION: UKhIN

1.Coal--Processing 2. Inorganic substances--Catalytic properties
3. Organic materials--Catalytic properties 4. Sulfur--Catalysis

Card 2/2

SOV/65-58-9-12/16

AUTHORS: Medvedev, K. P. and Kulishenko, A. Z.

TITLE: Investigations on the Participation of Forms of Sulphur During the Formation of Carbon Disulphide From Coke Oven Gas with the Aid of Radio-Isotopes. (Issledovaniye uchastiya form sery uglya v obrazovanii serougleroda koksovogo gaza pri pomoshchi radioizotopov)

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 9, pp 62 - 66, (USSR)

ABSTRACT: These investigations concern the types of sulphur participating in the forms of carbon disulphide during the coking of coal and schists. The use of radioactive isotopes makes it possible to determine the nature and quantity of each type of sulphur taking part in the process. Details of experimental procedures and calculations were described in earlier publications (Refs. 1, 3). 0.2 - 0.4% $CaSO_4.2H_2O$, tagged with the radioactive S^{35}, is added during investigations of the thermal chemical conversions. Coals from the Donets Basin grade G and PS were used; their composition and also sulphur content are given in Table 1. Table 2: data on the conversion of the sulphur to sulphur disulphide depending on the temperature of heating and the grade of coal.

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Investigations on the Participation of Forms of Sulphur During the Formation of Carbon Disulphide From Coke Oven Gas with the Aid of Radio-Isotopes.

It was found that mineral sulphur takes part in the formation of carbon disulphide. The role of pyrite and organic sulphur was investigated. The same grades of coal and standard schists comprising 20% grade G, 40% grade PZh, 20% K and 20% PS grade coal were tested. Analysis data is given (Table 3). The separation of natural sulphur in the form of carbon disulphide proceeds at a greater rate in less metamorphosed coal grade G than in the coal grade PS. Results on the role of natural, pyrite and organic sulphur during the formation of carbon disulphide are given in Table 4. Table 5: comparison of the types of sulphur in carbon disulphide formed during the coking of coals and schists. It was concluded that the degree of metamorphosis of the coal is an important factor. Details of complex reactions of disintegration and synthesis occurring at high temperatures in coke ovens can be obtained by using this

SOV/65-58-9-12/16

Investigations on the Participation of Forms of Sulphur During the Formation of Carbon Disulphide From Coke Oven Gas with the Aid of Radio-Isotopes.

method. There are 5 Tables and 7 References: 1 German and 6 Soviet.

1. Carbon sulfides--Properties 2. Sulfur--Chemical reactions 3. Coal gas--Chemical properties 4. Sulfur isotopes (Radioactive)--Applications

Card 3/3

AUTHOR: Medvedev, K.P. (Khar'kov) SOV/180-59-1-19/29

TITLE: Mechanism of the "Anticatalytic" Action of Iron Sulphide on the Process of Sulphur Evolution in the Coking of Coals and Charges (O mekhanizme "antikataliticheskogo" deystviya sul'fida zheleza na protsess vydeleniya sery pri koksovanii ugley i shikht)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1959, Nr 1, pp 100-105 (USSR)

ABSTRACT: It has been observed (Refs 1 and 2) that the presence or formation of iron sulphide (FeS) in the coking charge inhibits the evolution of hydrogen sulphide. This effect was noted by the author who found that the desulphurization during coking was reduced from 28 to 2% when a coal was pretreated with hydrogen to convert FeS_2 into FeS. The mechanism of this effect is still uncertain, but the author suggests that some light is thrown on it by his experiments in 1952 (Ref 3) in which 0.2 - 0.4% ferrous sulphide containing S^{35} as a radioactive tracer was mixed with coal and coked in a quartz tube, the distribution of the sulphide sulphur in the solid and volatile products then being determined. The data obtained at heating

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Mechanism of the "Anticatalytic" Action of Iron Sulphide on the Process of Sulphur Evolution in the Coking of Coals and Charges

temperatures of 350-900°C for two coals are shown in Tables 1 and 2 and indicate that as the heating temperature rises more of the sulphide sulphur goes into hydrogen sulphide. Reaction of FeS with atomic or molecular hydrogen cannot explain all the observed effects. Investigation of the sulphur distribution between the various forms present in the solid residues (Table 3) showed that considerable transfer of sulphur into the organic form takes place, the extent increasing with increasing heating temperature. Experiments in which finely ground coke was mixed with tracer-containing FeS and the sulphur distribution determined before and after heating to various temperatures, were carried out. These showed (Table 4) that temperature-produced exchange between the sulphide sulphur and organic sulphur of coke does not occur. The author concludes from the whole experimental material that the transformation of appreciable quantities of sulphide sulphur into the organic sulphur of coke in the thermal decomposition of strongly-coking coal is not due to exchange reactions:

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SOV/180-59-1-19/29

Mechanism of the "Anticatalytic" Action of Iron Sulphide on the Process of Sulphur Evolution in the Coking of Coals and Charges

direct chemical reactions occur between mineral impurities and the free radicals and atoms produced by thermal decomposition of coal organic materials. He proposes that these radicals behave towards the iron-sulphide as strong reducing agents to give a complex cation with single-electron bonds (Ref 6) between iron and four radicals and a sulphide anion. This splits into iron and two organic compounds, one of which contains the sulphur. The iron then reacts with hydrogen sulphide to re-form FeS. The author lays down four conditions for minimizing the inhibiting effect of iron sulphide on desulphurization in coking but states that in the present state of chemical knowledge their realization cannot all be produced. There are 4 tables and 7 Soviet references.

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SUBMITTED: December 11, 1957

SOV/68-58-2-2/20

AUTHORS: Medvedev, K.P., Petropol'skaya, V.M. and Nikitina, K.A.

TITLE: De-sulphurisation of Coals with Molecular Hydrogen (Obesserivaniye ugley molekulyarnym vodorodom)

PERIODICAL: Koks i Khimiya, 1959, Nr 2, pp 5 - 9 (USSR)

ABSTRACT: An investigation of the behaviour of pyrites in coal on interaction with hydrogen at various pressures and temperatures is described. The experimental technique consisted of treating the coal in a rotating autoclave with hydrogen either at a constant pressure and various temperatures or at a constant temperature and various pressures. The distribution of sulphur in coal before and after treatment and the degree of de-sulphurisation obtained as well as sulphur content of coke obtained from treated and untreated coal were compared. Three types of coals G (gas coal), K (coking coal) and OS were tested under the following experimental conditions: pressure of hydrogen from 1 to 100 atm and the temperature range 100 - 360 °C; reaction time - 2 hours. The experimental results obtained are shown in Tables 1-6. The behaviour of pyritic sulphur in coal G under 100 atm pressure was as follows (Table 1): under the influence of hydrogen at 100 atm an intensive decomposition of pyrite

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De-sulphurisation of Coals with Molecular Hydrogen

begins at 200 °C, i.e., about 150 °C below the temperature at which the reaction takes place in the absence of coal. The transfer of pyritic sulphur into organic is insignificant at all temperatures and does not exceed 0.2-0.3%. At temperature 200 - 250 °C, approximately half the pyritic sulphur is transformed into sulphide sulphur. At 300 °C, the content of sulphide sulphur sharply increases, becoming equal to the theoretically possible according to the reaction: $FeS_2 + H_2 = Fe + H_2S$.

This phenomenon is explained by the fact that at 300 °C the reduction of metallic oxides by hydrogen takes place with the formation of reactive metallic ions which then react with hydrogen sulphide previously evolved. Thus, the total sulphur content of coal at temperatures 100 - 250 °C decreases and at higher temperatures again increases. The sulphur content of sulphide, organic and total sulphur in coke from hydrogen-treated coal decreases with increasing temperature of hydrogenation up to 250 °C; the hydrogenation at 300 °C is accompanied with a sharp increase of all types of sulphur in coke. Thus, the total de-sulphurising effect of mild hydrogenation of coal is

insignificant. Similar experiments carried out with coking coal (K) gave similar results except that the temperature at which an intensive reaction of pyrite with hydrogen takes place and the temperature at which a sharp increase in sulphide sulphur takes place are respectively 50 and 40 °C higher than for gas coal (Table 2). Total sulphur content of the coal hydrogenated at temperatures 200 - 300 °C decreases (up to 47% decrease) but on hydrogenation at 340 °C the total sulphur content of coal remains the same as in untreated coal. Sulphur of coke obtained from coal hydrogenated at temperatures up to 300 °C decreases but sulphur content of coke from coal treated at 340 °C considerably increases, even in comparison with coke made from the untreated coal. The distribution of sulphur in coke made from K coal hydrogenated at various temperatures (Table 3) indicates that during the coking of coal K hydrogenated at 340 °C practically no volatile sulphur is evolved (about 95-98% of the initial sulphur is retained in coke). The experimental results for OS coal (Table 4) indicated that in this coal an intensive decomposition of pyrites takes place at a higher temperature (270 °) than in gas and

coking coals. Moreover, no sharp increase in the content of sulphide sulphur takes place even at 360 °C. Thus, with increasing hydrogenation temperature the degree of desulphurisation increases: on hydrogenation at 360 °C about 1.3% of sulphur was removed (initial sulphur 3.9%) but the decrease of sulphur content of coke amounted only to 0.4%, as about 93% of the initial sulphur was retained on coking (as against 67% for untreated coal). The results of hydrogenation of coal K at a pressure of 1 atm and various temperatures (170 - 340 °C) are shown in Table 5. The decomposition of pyrite begins at 170 °C and at 300 °C practically all pyrite is decomposed into sulphide and hydrogen sulphide. Unlike the hydrogenation at 100 atm no increase in the sulphide content at 340 °C takes place. However, coal treated at 340 °C and 1 atm pressure loses its caking ability. The influence of pressure (1, 50 and 100 atm) at 340 °C was studied on coal K (Table 6). It was found that: 1) at 340 °C pyrite in coal is decomposed at any pressure; 2) changes in pressure from 1 to 100 atm have no practical influence on the content of organic sulphur in coal, thus sulphur-containing organic compounds in coking coal are stable under these conditions;

De-sulphurisation of Coals with Molecular Hydrogen

3) with increasing hydrogen pressure, the amount of sulphide sulphur in coal increases; at 340 °C and 100 atm pressure the whole pyritic sulphur is transformed into sulphide sulphur. Thus, increasing hydrogen pressure leads to a decrease in the degree of desulphurisation. On the basis of the results obtained it is concluded that the method of treatment of coal with hydrogen is not suitable for decreasing the sulphur content of metallurgical coke. There are 6 tables and 7 references, 6 of which are Soviet and 1 German.

ASSOCIATION: UKhIN

SOV/68-59-6-5/25

AUTHORS: Medvedev, K.P. and Batrakova, I.A.

TITLE: The Content and Concentration of Rare and Trace Elements in Coal (Soderzhaniye i nakopleniye redkikh i rasseyannykh elementov v kamennykh uglyakh)

PERIODICAL: Koks i Khimiya, 1959, Nr 6, pp 13-17 (USSR)

ABSTRACT: A review of literature on the presence of rare and trace elements in coals is given.
There are 6 tables and 11 references, (of which 8 are Soviet, 2 English and 1 German).

ASSOCIATION: UKhIN

Card 1/1

MEDVEDEV, K.P.

Structure of the organic matter contained in coals. Koks i khim. no.3:8-13 '60. (MIRA 13:6)

1. Ukrainskiy uglekhimicheskiy institut.
(Coal)

KULISHENKO, A.Z.; MEDVEDEV, K.P.

Use of the radioisotopes S^{35} in the study of the process of coal desulfurization. Koks i khim. no.7:5-10 '60. (MIRA 13:7)

1. Ukrainskiy uglekhimicheskiy institut.
(Coal) (Desulfuration) (Radioisotopes)

MEDVEDEV, K.P.

Origin and forms of organic and inorganic sulfur compounds in coals. Khim. i tekh. topl. i masel 6 no. 5:29-33 My '61. (MIRA 14:5)

1. Ukrainskiy uglekhimicheskiy institut.
(Coal--Analysis) (Sulfur compounds)

MEDVEDEV, K.P.

Chemistry of the natural carbonization process (metamorphism). Koks i khim. no.8:9-13 '61. (MIRA 15:1)

1. Ukrainskiy uglekhimicheskiy institut.
(Coal) (Metamorphism (Geology))

MEDVEDEV, K. P. (Khar'kov); PETROPOL'SKAYA, V. M. (Khar'kov)

Synthesis of sintering materials by the method of cyclic condensation of aromatic hydrocarbons in presence of $AlCl_3$. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.6:202-207 N-D '62. (MIRA 16:1)

(Chemistry organic(Synthesis))
(Condensation products(Chemistry))

MEDVEDEV, K.P.

Effect of the structure of coal as a solid on its physico-chemical and chemical properties. Khim. i tekh. topl. i masel 8 no.4:34-37 Ap '63. (MIRA 16:6)

(Coal research)

L 18170-63 EWP(q)/BDS/EWT(m) AFFTC/ASD JD

ACCESSION NR: AP3004231 S/0032/63/029/007/0805/0805

58
56

AUTHORS: Medvedev, K. P.; Khar'kina, L. M.; Petropol'skaya, V. M.; Nikitina, K. A.

TITLE: Accelerated method for determination of germanium in coal tar, heavy coal-tar products, and coal-tar pitch

27

SOURCE: Zavodskaya laboratoriya, v. 29, no. 7, 1963, 805

TOPIC TAGS: coal tar, pitch, distillation, germanium

ABSTRACT: In the process of coal tar and coal tar pitch distillation practically all the germanium content is located in nonvolatile products and does not volatilize with the light tar fractions. Consequently, a simple, rapid method for germanium determination was developed--combustion of samples in porcelain dishes without recourse to an oxidizing agent. An aliquot of 1-3 gms of tar was placed in a porcelain dish, covered with a paper filter to prevent spattering, and heated on sand to remove the light volatile substances. Thereafter the dish was placed in a furnace at 550C until all the carbon had burned out. The residue

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ACCESSION NR: AP3004231

was transferred to a distillation flask by means of 10 ml of 6-n hydrochloric acid, then the germanium was distilled out as germanium chloride. The germanium was determined in a photocolorimeter in the form of a reaction compound with phenylfluorone. This method is nearly three times faster than the standard oxidation procedure, and the difference in yield by the two techniques does not exceed + -·10%, which is within the permissible limits of error.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy uglekhimicheskiy institut (Ukrainian Scientific Research Institute of Coal Chemistry)

SUBMITTED: 00 DATE ACQ: 02Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 001 OTHER: 000

Card 2/2

MEDVEDEV, Konstantin Prokof'yevich; TYUTYUNNIKOV, Yu.B.; otv.red.; BELINA, R.A., red.izd-va; KLEYNMAN, M.R., tekhn.red.

[Use of radioisotopes in coal chemistry] Primenenie radioizotopov v koksokhimii. Khar'kov, Metallurgizdat, 1963. 143 p. (MIRA 16:6)

(Coke industry--By-products)
(Radioisotopes)

MEDVEDEV, K.P.; KHUDOKORMOVA, N.P.; AKIMOVA, L.M.; SENICHENKO, S.Ye.; KOTOVA, A.D.

Investigating the relation between the composition of the mineral part of coals and their germanium content. Koks i khim. no.1:9-13 '63. (MIRA 16:2)

(Coal--Analysis)

MEDVEDEV, K.P.; KHAR'KINA, L.M.; PETROPOL'SKAYA, V.M.; NIKITINA, K.A.

Rapid method for determining germanium in coal tars, coke-oven heavy residues, and pitch. Zav.lab. 29 no.7:805 '63.

(MIRA 16:8)

1. Ukrainskiy nauchno-issledovatel'skiy uglekhimicheskiy institut.
(Germanium--Analysis) (Coal-tar products)

MEDVEDEV, K.P.; PETROPOL'SKAYA, V.M.; NIKITINA, K.A.; KHAR'KINA, L.M.

Polyatomic phenols obtained by high-temperature carbonization. Koks i khim. no.10:33-36 '62. (MIRA 16:9)

1. Ukrainskiy uglekhimicheskiy institut.
(Phenols) (Coke industry—By-products)

BRODOVICH, Aleksandra Iosifovna; MEDVEDEV, K.P., red.; BERNSHTEYN, T.I., red.izd-va; ISLENT'YEVA, P.G., tekhn. red.

[Ethylene from coke gas as a raw material for organic synthesis] Etilen koksovogo gaza kak syr'e dlia organicheskogo sinteza. Moskva, Metallurgizdat, 1963. 326 p. (MIRA 17:2)

MEDVEDEV, K.P.; AKIMOVA, L.M.

Simplified methods for the determination of germanium in coal, charges, and coke. Koks i khim. no.3:15-19 '64. (MIRA 17:4)

L 22335-66 EWT(1)/EWP(m)/EWA(d)/EWA(1) WW/RM
ACC NR: AP6013193 SOURCE CODE: UR/0421/66/000/002/0019/0026

48
B

AUTHOR: Avduyevskiy, V. S. (Moscow); Medvedev, K. I. (Moscow)

ORG: none

TITLE: Separation of three-dimensional boundary layer

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 2, 1966, 19-26

TOPIC TAGS: supersonic aerodynamics, boundary layer, laminar boundary layer, boundary layer separation, three dimensional boundary layer

ABSTRACT: An analysis is presented of the separation of a three-dimensional boundary layer on an arbitrary curvilinear surface. Expressions for criteria for three-dimensional separation are established for laminar and turbulent flows, assuming that the friction stress τ_w at the point of separation is equal to zero. The location of the separation line is determined from the solution of an ordinary differential equation of the angle γ between the surface streamline and a streamline on the outer boundary of the boundary layer. Supersonic flows over the surface of an infinite cylinder with slip and over a cone at an angle of attack are analyzed in an orthogonal curvilinear coordinate system (x,z). Experiments were carried out with: 1) a sharp cone with a semiapex angle $\theta = 15°$ at an angle of attack $\alpha = 30°$, and $M = 3.6$; and 2) a blunt-nosed cone of $\theta = 10°$ at an angle of attack 20°, $M = 2.9$, and $Re = 7.8 \times 10^5$. Photographs of the flow are presented showing the separation lines on both models. Critical con-

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L 22335-66

ACC NR: AP6013193 O

ditions under which separation of the boundary layer can be expected are discussed in terms of the form parameter $\Gamma = \delta/\rho u_1^2 \cdot dp/dx$. The case of separation on a line of flow convergence that is a streamline on the surface whose geodesic curvature is equal to zero and which coincides with generatices located in the plane of symmetry on the windward side of a body at an angle of attack is discussed. It is shown that separation occurred on the line $z = \pi$ at a value of the three-dimensionality parameter $K = -0.85$. Orig. art. has: 9 figures and 37 formulas. [AB]

SUB CODE: 20/ SUBM DATE: 08May65/ ORIG REF: 001/ OTH REF: 002/ ATD PRESS: 4242

Card 2/2 dda

MEDVEDEV, K. YE.

AUTHOR: Medvedev, K. Ye. 57-10-30/33

TITLE: On the Selection of the Form of the Sample for Testing Ceramic Capacitor Materials for Breakdown (K voprosu o vybore formy obraztsa dlya ispytaniya keramicheskikh kondensatornykh materialov na proboy).

PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 10, pp. 2410-2420 (USSR).

ABSTRACT: The existing methods and processes for the decrease of the heterogeneity of the field as well as of the corona in the case of the investigations of ceramics for breakdown are dealt with. The deficiencies of the present sample types, which are being used for the physical investigations of ceramics, are shown. The construction of a new type of ceramic sample for the determination of the electric strength of ceramic dielectrics is given, By means of it it is possible to increase the voltage applied (direct voltage, alternating voltage 2 ÷ 3 MHz and impulse-voltage) at room temperature as well as at an increased temperature of from 100 to 120°C without surface discharges and with a corona at the electrode boundaries, to a breakdown. The theoretic as well as the experimental data for the selection of the form and measurement of the samples are given. Recommendations are given for the construction of new ceramic high-voltage condensers

Card 1/2

On the Selection of the Form of the Sample for Testing Ceramic Capacitor Materials for Breakdown. 57-10-30/33

with high discharge voltages at its surface.
There are 3 tables, 8 illustrations and 4 Slavic references.

SUBMITTED: February 28, 1957.

AVAILABLE: Library of Congress.

Card 2/2

MEDVEDEV, K.Ye., Cand Tech Sci -- (diss) "Study of the behavior of high-voltage ceramic condensers in impulse ~~regimes~~ and ~~elaboration~~ of their ~~constructions~~." Len, 1958, 19 pp with graphs, (Min of Higher Education USSR. Len Electrical Engineering Inst im V.I. Ul'yanov (Lenin)) 150 copies (KL, 27-58, 110)

05194

SOV/142-2-3-2/27

9(2,3)

AUTHORS: Mandryka, N.A., Medvedev, K.Ye

TITLE: New Ceramic High-Voltage Capacitors

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 3, pp 278-282 (USSR)

ABSTRACT: The authors describe new types of ceramic high-voltage capacitors which are produced by the Soviet industry or which will be produced in the near future. The ceramic high-voltage capacitors (KVKB, KVKG, KVKT, KVDB and others) presently produced by the Soviet industry do not meet completely the requirements of modern radio engineering. Reactance power, capacitance and voltage ratings are inadequate and the dimensions are too great. The Soviet industry works systematically on the development of new, miniature ceramic high-voltage capacitors having higher reactance power, capacitance and operational voltage. Capacitors for pulse circuits are also being developed. New types of capacitors were created and the mass production of some of them has started. The capacitors described in this article are listed according to their fields of application. First, the authors mention direct

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New Ceramic High-Voltage Capacitors

current capacitors which are used as filters, KOB-1 (500 picofarads, 12 kv, 21 mm diameter, 18 mm long) and KOB-2 (500 picofarads, 20 kv, 33 mm diameter and 27 mm long). The capacitors are shown in fig 1. Then the authors describe capacitors designed for work in high-frequency generators. The KBE-1 (180 picofarads, 10 kv HF voltage, 25 kva reactance power), KBE-2 (56 picofarads, 10 kv, 15 kva), and KBE-3 (30 picofarads, 12 kv, 15 kva) capacitors are 30 mm long and have diameters of 52, 35 and 25 mm, respectively. At the end of 1957, the Soviet industry developed tubular and disk capacitors having considerable reactance power ratings. These are capacitors KVT (4300 picofarads, maximum operating voltage 8 kv, 100 kva maximum, frequency range 30-60 kc). The operating voltage may be increased to 25 kv in case dc is used. The overall dimensions are 90 mm length and 13 mm diameter. The data of the high-voltage, ceramic disk capacitors KVD-51, KVD-240, KVD-5600 (the numbers indicate the picofarads) are compiled in table1. Fig 2 shows a photograph of capacitors KBE, KVT, KVD-51, KVD-240 and KVD-5600. Table 2 contains data of miniature capacitors for pulse circuits: KVS-1, KVS-2, KVS-3, KVS-4, KVS-5, KVB-1, LVB-2,

New Ceramic High-Voltage Capacitors

KVB-3, KVB-4 which are also shown in fig.3. Finally, the authors describe anode-separating cylindrical ceramic high-voltage capacitor KVTs (150 picofarads, 15 kv, 200 kva, outer diameter 134 mm, inner diameter 106 mm, height 53 mm) which was designed for the metalloceramic tube GI-14B. The ring-shaped, ceramic high-voltage blocking capacitor KVK (3000 picofarads, 3 kv, 50 kva, outer diameter 175 mm, inner diameter 115 mm, height 15 mm) was designed for the tube GU-4A. The KVTs and KVK capacitors are shown in fig. 4. In fig.5, these capacitors are shown with the respective tubes. The article was recommended for publication by the Kafedra dielektrikov poluprovodnikov Leningradskogo elektrotekhnicheskogo instituta imeni V.I. Ul'yanova (Lenina) (Leningrad Electrical Engineering Institute imeni V.I. Ul'yanov (Lenin)). There are 5 photographs and 2 tables.

SUBMITTED: August 26, 1958

Card 3/3

MEDVEDEV, K. Ye.

High-voltage pulsed ceramic capacitors. Usp.nauch.fot. 6:75 '59.
(MIRA 13:6)
(Electric capacitors)

AUTHORS: Volokobinskiy, Yu.M. and Medvedev, K.Ye.

S/146/62/005/006/005/006
D201/D308

TITLE: Thermal elastic stresses in radio-components for instrumentation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Priborostroyeniye, v. 5, no. 6, 1962, 101-109

TEXT: The authors give the theory of thermal stresses occurring in radio-components under the effect of high-frequency fields, and in particular that of stresses in the insulators, plates and shafts made of brittle ceramic materials. The electric field strength resulting in the destruction of a cylindrically shaped component is

$$= 5.8 \cdot 10^6 \sqrt{\frac{1}{R^2-3r_o^2 + \frac{4r_o^4}{R^2-r_o^2} \ln \frac{R}{r_o}} \cdot \frac{K}{\varepsilon \operatorname{tg}\delta_f} \cdot \frac{(1-\omega)\sigma_p}{\alpha E_y}} \quad \text{v. cm}^{-1} \quad (45)$$

rd 1/2

S/146/62/005/006/005/006
Thermal elastic stresses ... D201/D308

Cylindrical insulators, subject to compression split axially and those subject to extension split perpendicularly to their axis. There are 3 figures.

ASSOCIATIONS: Leningradskiy elektrotekhnicheskiy institut im. V.I. Ul'yanova (Lenina) (Leningrad Electrotechnical Institute im. V.I. Ul'yanov (Lenin)); Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad Institute of Precision Mechanics and Optics)

SUBMITTED: May 5, 1962

Card 2/2

BOGORODITSKIY, I.P.; VOLOKOBINSKIY, Yu.M.; MEDVEDEV, K.Ye.

Destructive voltage on ceramic partition insulators at high and ultra-high frequencies. Izv. vys. ucheb. zav.; radiotekh. 6 no.1:45-51 Ja-F '63.

1. Rekomendovana kafedroy poluprovodnikov i dielektrikov Leningradskogo elektrotekhnicheskogo instituta imeni V.I.Ul'yanova (Lenina).
(Electric insulators and insulation)

VSESVYATSKIY, B.V., prof.; VIDYAKINA, Ye.M., kand.pedagog.nauk; KREMENETSKIY, N.G.; SUSLOV, V.V.; MEDVEDEV, L.A., uchitel'; CHADOVA, K.A.; ROZINA, T.A.

Discussing the curriculum of biology. Biol.v shkole no.6: 22-27 N-D '59. (MIRA 13:3)

1. Moskovskiy gorodskoy pedagogicheskiy institut (for Vsesvyatskiy). 2. Mariyskiy pedagogicheskiy institut (for Vidyakina). 3. Srednyaya shkola No.7 g.Kaliningrada Moskovskoy oblasti (for Kremenetskiy, Suslov). 4. Srednyaya shkola s.Ivanovka Lyuksemburgskogo rayona Orenburgskoy oblasti (for Medvedev). 5. Kaluzhskiy oblastnoy institut usovershenstvovaniya uchiteley (for Chadova). 6. Kaluzhskiy pedagogicheskiy institut (for Rozina).

(Biology--Study and teaching)

MEDVEDEV, L.A., uchitel'

Socially useful work of young naturalists. Biol. v shkole no.5:56-59 S-O '60. (MIRA 13:11)

1. Ivanovskaya srednyaya shkola, Lyuksemburgskogo rayona, Orenburgskoy oblasti.
(Plant breeding—Study and teaching)
(Forest nurseries)

[illegible], [illegible]

[illegible], [illegible] A. --"Determination of the Method of High-Speed Sinking of Horizontal Shafts in Rocks as Applied to Conditions of [illegible] Karaganda Coal Basin." * (Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions, Acad Sci of Kazakh SSR, Inst of Metallurgy and [illegible], [illegible], [illegible]

SO: Knizhnaya Letopis', No. [illegible], 1 [illegible]

* For Degree of Doctor of Technical Sciences

MEDVEDEV, L.A.

Hole boring with use of expanders in Karaganda mine ore bed headings. Trudy Inst. gor. dela AN Kazakh. SSR no.3:34-39 '58.
(Karaganda Basin—Coal mines and mining) (MIRA 11:6)
(Boring)

AUTHOR: Medvedev, L. SOV/24-58-4-1/39

TITLE: Aleksandr Onisimovich Spivakovskiy (Commemorating His 70th Birthday (K 70-letiyu so dnya rozhdeniya)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 4, pp 3 - 4 (USSR)

ABSTRACT: On January 30, 1958, the Institut gornogo dela AN SSSR (Institute of Mining of the Ac.Sc.USSR) and Moskovskiy gornyy institut (Moscow Mining Institute) had a joint meeting in honour of the 70th birthday and 40th anniversary of the scientific, pedagogic and engineering activity of Corresponding Member of the Ac.Sc. USSR A.O. Spivakovskiy. In addition to Soviet participants, delegates from various Soviet bloc countries were present. For his outstanding services in the interests of developing the mining sciences, Spivakovskiy was elected in 1946 Corresponding Member of the Ac.Sc.USSR and, from 1949 onwards, he has been directing the research in the field of mechanisation of mining at the Institute of Mining of the Ac.Sc.USSR. He has published over 130 papers and monographs, 10 of which are classical works which form a basis for training mining engineers in the Soviet Union as well

Card1/2

Aleksandr Onisimovich Spivakovskiy (Commemorating His 70th Birthday)

in other Soviet bloc countries. He was a leading figure in the planning work of many projects involving mechanisation of coal mining. Spivakovskiy is a member of the editorial board of the journals "Bezopasnost' truda v promyshlennosti" ("Safety of Labour in Industry"), "Nauchnyye doklady vysshey shkoly, Gornoye delo" ("Scientific Communications of Higher Teaching Establishments, Mining"). He is also a member of the Mining-metallurgical Section of the Committee for Awarding Lenin Prizes, of the Mining Specialists Commission of the Higher Attestation Commission, the Ministry for Higher Education, the Scientific-technical Council, the Section for Building Machinery for the Fuel Industry of Gosplan USSR, the Scientific Council of the Institute of Mining of the Ac.Sc.USSR, the Moscow Mining Institute imeni Stalin, the All-Union Mining Research Institute and others. A.O. Spivakovskiy was awarded three Red Labour Order Banners, the Lenin Order, the Stalin Prize Third Order, etc.

SIMKIN, B.A., kand.tekhn.nauk; MEDVEDEV, L.A.; PAKHOMOV, Ye.M., gornyy inzh.; SHIBANOV, V.I., gornyy inzh.

Open-cut mining of "Stoylenskoye" and "Yuzhno-Lebedinskoye" deposits. Gor.zhur. no.9:14-19 S '60. (MIRA 13:9)

1. Institut gornogo dela AN SSSR, Lyubertsy, Moskovskoy oblasti.
(Kursk Magnetic Anomaly) (Strip mining)

MEDVEDEV, L.A.

Using rotary units in open pits of the Kursk Magnetic Anomaly. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 16 no.6:3-7 '63. (MIRA 16:8)
(Kursk Magnetic anomaly--Excavating machinery)

L 05717-67 EWT(d)/FSS-2/EWT(1) WR
ACC NR: AP6009317 (A) SOURCE CODE: UR/0256/65/000/009/0029/0033

AUTHOR: Belogrivtsev, P. P. (Colonel); Medvedev, L. A. (Colonel)

ORG: None

TITLE: Tactical training of radar operators and plotters

SOURCE: Vestnik protivovozdushnoy oborony, no. 9, 1965, 29-33

TOPIC TAGS: air defense tactic, air defense system, radar station, radar system, radar observation, training procedure, TACTICAL WARFARE

ABSTRACT: A general discussion of various aspects of tactical training of operators and plotters assigned to air defense radar stations is presented. A good understanding of tactical air operations and the knowledge of various aircraft types and flying characteristics are considered to be requisite qualifications for accurate interpretations of radar echo signals. Two examples of a successful tactical approach used by two air-defense units during air attack exercises are cited while a purely technical approach demonstrated unsuccessfully by a third unit is criticized. The tactical training of operators and plotters must include not only a profound study of hostile forces weapons, (aircraft, missiles, rockets, etc.) but also a study of their tactical actions and operations. A profound study of Soviet Air Force capabilities and tactical actions of fighter aviation and air-defense rocket troops is also recommended including guidance actions and flying target identification. A high standard of proficiency must be attained by opera-

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L 05717-67

ACC NR: AP6009317

tors and plotters in tactical training by means of solutions of various problems, practical exercises, demonstrations, simulated actions and by using various training facilities. It is stressed that the tactical training must be developed in close coordination with the basic technical radar training. In conclusion, desirability is expressed of introducing the tactical training as an additional subject for raising the qualifications and proficiency of operators and plotters.

SUB CODE: 15/ SUBM DATE: None

Card 2/2

DITMAN, Irina Alekseyevna; MEDVEDER, Lyudmila Dmitriyevna; STOLETNYAYA, Anna Markianovna; GEL'FENBEYN, L.L., otv.red.; TROFIMENKO, A.S., tekhn.red.

[Mining; a reader] Mining. Khrestomatiia po gornomu delu. Khar'kov, Izd-vo Khar'kovskogo ordena Trudovogo krasnogo znameni gos.univ. imeni A.M.Gor'kogo, 1959. 120 p. (Text in English with vocabulary). (MIRA 12:12)

(Mining engineering)

MEDVEDEV, L.D.

Stratigraphic setting of the lower Paleozoic manganous hermatite-siliceous formation in the western Dzhetym-Tau. Izv.AN Kir.SSR. Ser.est.i tekh.nauk 2 no.6:121-127 '60. (MIRA 15:5)
(Dzhetym-Tau—Geology, Stratigraphic)

MEDVEDEV, L.D.

Iron-manganese concretions in red siliceous rocks of the Dzhetym-Tau Range Ordovician formations. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 2 no.8:117-125 '60. (MIRA 13:12)
(Dzhetym-Tau Range—Geology, Stratigraphic)
(Iron ores) (Manganese ores)

MEDVEDEV, L.D.

Lithology and ore potential of the Lower Ordovician ferromanganese formation in the Dzhetymtoo (central Tien Shan). Nauch. trudy TashGU no.256 Geol. nauki no.22:103-108 '64 (MIRA 18:2)

EDVEDEV, L. G.

Theory and Methods of Evaluation of Measurements

Dissertation: "Some Problems of Reinforcement Operations in Mine Shafts." Cand Tech Sci, Inst of Mining, Acad Sci USSR, 7 Apr 54. (Vechernyaya Moskva Moscow, 29 Mar 54)

SO: SUM 213, 20 Sep 1954

GUDALOV, Vladimir Petrovich, LEYTES, Zakhar Moiseyevich, MALEVICH, Nikolay Aleksandrovich, MEDVEDEV, Leonid Georgiyevich, PODZOLKIN, Nikolay Yakovlevich, SHAKHMEYSTER, Lev Grigor'yevich,; SPIVAKOVSKIY, A.O., prof., red.; KOLOMIYTSEV, A.D., red. izd-va,; PROZOROVSKAYA, V.L., tekhn. red.

[Over-all mechanization of underground transportation] Voprosy kompleksnoi mekhanizatsii podzemnogo transporta. Moskva, Ugletekhizdat, 1958. 195 p. (MIRA 11:11)

1. Chlen-korrespondent AN SSSR (for Spivakovskiy)
(Mine railroads)
(Coal-handling machinery)

MEDVEDEV, L.G.

Transmission of forces by flexible elements in hoisting and hauling equipment. Mauch. trudy MGI no. 20:102-106 '58.
(MIRA 11:8)

(Mining machinery--Transmission devices)

[illegible]VSEDOV, L. G.

"Utilization of a Conveyor with a Large Angle of Inclination."

report presented at the Conference on Benefication of Useful Minerals, sponsored by the Learned Council of the [illegible], AS [illegible], Balakhash/Karaganda, 28 Nov - 4 Dec 1960

SPIVAKOVSKIY, A.O.; MEDVEDEV, L.G.; POTAPOV, M.G.; D'YAKOV, V.A.

Prospects of expansion and ways of improving conveyer-transportation in open-pit mining. Ugol' 36 no.2:17-21 F '61. (MIRA 14:2)
(Strip mining) (Conveying machinery)

ACC NR: AR7000849 SOURCE CODE: UR/0058/66/000/009/D094/D094

AUTHOR: Medvedev, L. I.; Sarvarov, D. I.

TITLE: Synchronous Q switch for a laser resonator

SOURCE: Ref. zh. Fizika, Abs. 9D760

REF SOURCE: Sb. Tezisy dokl. Yubileyn. nauchn. konferentsii, posvyashch. XX-letiyu in-ta. Kazansk. fiz.-tekhn. in-t, 1966, Sekts. fiz. n. Kazan', 1966, 82-84

TOPIC TAGS: Q switch, laser switch, synchronous Q switch

ABSTRACT: A description is given of a Q-switch with a combustible film and a synchronous pulse generator for controlling the switch and the laser flash lamp. The film is volatilized using a TGI1-400/16 thyratron fed from a 0.05 μf capacitor charged at 7—12 kv. A layer of pure aluminum, with a 0.5 adsorption factor for the given wave or aluminum coated with a high-temperature oxidation-resistant nitrocellulose varnish is used as the film. In the latter case there is a more complete combustion of the layers. Yu. Kutev. [Translation of abstract]

[NT]

SUB CODE: 20/

Card 1/1

MEDVEDEV, L. M.

MEDVEDEV, L. M.

Afforestation

Principles of planning shelterbelts in the Trans-Volga districts
Les i step ' no. 4, April 1952.

Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

LOPATIN, I.K.; MEDVEDEV, L.N.

Description of the larva of Clytra opaca Jacobs. (Coleoptera, Chrysomelidae) from Tajikistan. Dokl. AN Tadzh. SSR 6 no.2: 43-45 '63. (MIRA 17:4)

1. Zoologicheskiy institut AN SSSR. Predstavleno chlenom-korrespondentom AN Tadzhikskoy SSR M.N.Narzikulovym.

MEDVEDEV, L.N.

Leaf beetles (Coleoptera, Chrysomelidae) of Central Asia.
Zool.zhur. 34 no.5:1177-1178 S-O '55. (MLRA 9:1)

1.Kafedra entomologii Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.
(Asia, Central--Leaf beetles)

USSR/General and Specialized Zoology - Insects. P.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39904

Author : ~~Medvedev, L.N.~~

Inst : Institute of Biology, AS, TurkmSSR.

Title : A New Genus and Species of the Leaf Beetle Allecumolpus gen. nov. from South-Eastern Turkmenia.

Orig Pub : Tr. In-ta biol. AN TurkmSSR, 1956, 4, 242.

Abstract : The genus Allecumolpus, close to genus Parnops, and the species A. smirnovi sp.n. were described.

Card 1/1

USSR/General and Specialized Zoology - Insects. I.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39903

Author : Medvedev, L.N.

Inst : Institute of Biology, AS, TurkmSSR.

Title : A Survey of Turkmenian Species of Cryptocephalus Geoffr.

Orig Pub : Tr. in-ta biol. AN TurkmSSR, 1956, 4, 243-250

Abstract : The genus Cryptocephalus is represented in Turkmenia by 20 species. More than half of them belong zoogeographically to the Caucasian region, the rest belong to the Turkmen region. An identification table of species and descriptions of C. verae sp. n. and C. similis sp. n. are given.

Card 1/1

MEDVEDEV, L.N.

Data on leaf beetles (Coleoptera, Chrysomelidae) of the Far East.
Zool.zhur. 35 no.1:156-157 Ja '56. (MLRA 9:5)

1. Kafedra entomologii Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.
(Soviet Far East--Leaf beetles)

OGLOBLIN, D.A., [deceased]; MEDVEDEV, L.N.

New palearctic chrysomelid beetles (Coleoptera, Chrysomelidae). Ent. oboz.35 no.4:895-898 '56. (MLRA 10:2)

1. Kafedra entomologii Moskovskogo Gosudarstvennogo universiteta, Moskva.

(Leaf beetles)

MEDVEDEV, L.N.

Wedge-shaped leaf beetles (Coleoptera, Chrysomelidae, Hispinae) in the U.S.S.R. [with summary in English]. Zool. zhur. 36 no.2:293-297 F '57. (MLRA 10:6)

1. Kafedra entomologii Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.

(Zolotoy Rog region--Leaf beetles)

MEDVEDEV, L.N.

Survey of the eumolpids (Coleoptera, Chrysomelidae) of Central Asia [with summary in English]. Zool.zhur. 36 no.9:1323-1337 S '57. (MIRA 10:10)

1.Kafedra entomologii Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.
(Soviet Central Asia--Leaf beetles)

MEDVEDEV, L.N.

Survey of the Galerucinae (Coleoptera, Chrysomelidae) of Turkmenistan. Izv.AN Turk.SSR no.6:116-119 '59. (MIRA 13:5)

1. Tyumenskiy pedagogicheskiy institut.
(Turkmenistan--Leaf beetles)

MEDVEDEV, L.N.

Review of the palearctic species of the genus Clytra Laich. (Coleoptera, Chrysomelidae). Ent.oboz. 40 no.3:636-651 '61. (MIRA 15:3)

(Leaf beetles)

MEDVEDEV, L.N.

Find of a leaf beetle subfamily (Coleoptera, Chrysomelidae, Chlamydinae) hitherto unknown in the fauna of the U.S.S.R. Dokl.AN SSSR 136 no.1:247-248 Ja '61. (MIRA 14:5)

1. Zoologicheskiy institut AN SSSR. Predstavleno akademikom Ye.N. Pavlovskim.
(Maritime Territory--Leaf beetles)

MEDVEDEV, L.N.

New species of Mecynotarsus (Coleoptera, Anthicidae) from the Fergana Valley. Uzb. biol. zhur. 6 no.1:72 '62. (MIRA 15:3)

(FERGANA--ANTHICIDAE)

MEDVEDEV, L.N.; SEPERTELADZE, M.P.

New subspecies of Cryptocephalus ergeniensis Mor. from Georgia.
Soob. AN Gruz. SSR 28 no.6:699-700 Je '62. (MIRA 15:7)

1. Akademiya nauk Gruzinskoy SSR, Institut zoologii, Tbilisi.
Predstavleno chlenom-korrespondentom Akademii nauk Gruzinskoy
SSR L.P.Kalandadze.
(Georgia--Leaf beetles)

MEDVEDEV, L. N.

Two new species of Labidostomis(Coleoptera, Chrysomelidae) from the U.S.S.R. Trudy Zool. inst. 30:254-257 '62.
(MIRA 15:10)

(Leaf beetles)

MEDVEDEV, L.N.

Functional importance of secondary sexual characteristics of leaf beetles (Coleoptera, Chrysomelidae, Camptosoma). Zool.zhur. 41 no.1:77-84 Ja '62. (MIRA 15:4)

1. Zoological Institute, U.S.S.R. Academy of Sciences, Leningrad.
(Leaf beetle)

MEDVEDEV, L.N.

Leaf beetles of the Northwestern Caucasus (Coleoptera, Chrysomelidae). Report No.1. Description of new forms. Zool. zhur. 41 no.3:384-390 Mr '62. (MIRA 15:3)

1. Zoological Institute of the Academy of Sciences of the U.S.S.R. Leningrad.

(Caucasus, Northern--Leaf beetles)

MEDVEDEV, L.N.

Review of leaf beetles of the genus Antipa (Coleoptera, Chrysomelidae) in the U.S.S.R. and neighboring countries. Ent. obozr. 41 no.3:613-624 '62. (MIRA 15:10)

1. Zoologicheskiy institut AN SSSR, Leningrad.
(Leaf beetles)

MEDVEDEV, L.N.

Taxonomy and biology of the larvae of the subfamily Clytrinae (Coleoptera, Chrysomelidae). Zool. zhur. 41 no.9:1334-1344 S '62. (MIRA 15:11)

1. Zoological Institute, Academy of Sciences of the U.S.S.R., Leningrad.

(Leaf beetles)